



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/686,541

10/15/2003

Vito Cellini

C-0130.07

3490

41418

7590

10/30/2008

LAW OFFICES OF CHRISTOPHER L. MAKAY

1634 MILAM BUILDING

115 EAST TRAVIS STREET

SAN ANTONIO, TX 78205-1763

EXAMINER

CARTAGENA, MELVIN A

ART UNIT

PAPER NUMBER

3754

MAIL DATE

DELIVERY MODE

10/30/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

1 UNITED STATES PATENT AND TRADEMARK OFFICE

2  
3  
4 BEFORE THE BOARD OF PATENT APPEALS  
5 AND INTERFERENCES  
6

7  
8 *Ex parte* VITO CELLINI, RICHARD W. MARTIN and  
9 L. DAVID PARKER  
10

11  
12 Appeal 2008-4104  
13 Application 10/686,541  
14 Technology Center 3700  
15

16  
17 Decided: October 29, 2008  
18

19  
20 *Before* WILLIAM F. PATE, III, JENNIFER D. BAHR and DANIEL S.  
21 SONG, *Administrative Patent Judges*.

22  
23 SONG, *Administrative Patent Judge*.  
24

25 DECISION ON APPEAL  
26

27 STATEMENT OF THE CASE

28 The Appellants appeal under 35 U.S.C. § 134 (2002) from a Final  
29 Rejection of claims 1-20. We have jurisdiction under 35 U.S.C. § 6(b)  
30 (2002).

1           The Appellants claim a flashlight having a nozzle and a trigger to a  
2 spray, e.g., tear gas. The Appellants also claim a method of self-defense  
3 using such a flashlight.

4           Independent claims 1 and 16 reads as follows:

5           1.     A tool, comprising:  
6                 a body defining a canister compartment and a flashlight  
7 compartment;  
8                 a flashlight head securable to the body at a first end;  
9                 a switch assembly housed by the body, wherein the  
10 switch assembly controls power delivery to the flashlight head  
11 from a battery disposed in the flashlight compartment;  
12                 a nozzle securable to the body at a second end; and  
13                 a trigger assembly mounted on the body proximate to the  
14 switch assembly, wherein actuation of the trigger assembly  
15 ejects spray through the nozzle from a spray canister disposed  
16 in the canister compartment, and further wherein either the  
17 trigger assembly or the switch assembly may be actuated  
18 without changing grip on the body.

19  
20           16.    A method of self-defense, comprising:  
21                 providing a tool comprising:  
22                     a switch assembly that operates a flashlight head  
23                     secured to a first end of the tool,  
24                     a trigger located proximate to the switch assembly,  
25                     whereby the trigger engages a spray canister disposed in  
26                     the tool, and  
27                     a nozzle secured to a second end of the tool,  
28                     whereby the spray canister communicates with the  
29                     nozzle;  
30                 gripping the tool with the thumb positioned over the  
31 trigger; and

1 moving the trigger with the thumb from an unfired  
2 position to a fired position that ejects spray from the spray  
3 canister and through the nozzle.  
4

5 The prior art relied upon by the Examiner in rejecting the claims is:

6 Mangels US 3,716,170 Feb. 13, 1973

7  
8 Tuscher US 5,941,629 Aug. 24, 1999

9  
10 The Examiner rejected claims 1-20 under 35 U.S.C. § 103(a) as  
11 unpatentable over Mangels and Tuscher.

12 We AFFIRM-IN-PART.  
13

#### 14 ISSUE

15 The primary issue raised in the present appeal is whether the  
16 Appellants have shown that the Examiner erred in combining Mangels and  
17 Tuscher because such modification would make Mangels unsuitable for its  
18 intended purpose and/or change its operation, and because the combination  
19 does not disclose a nozzle “securable to the body at a second end.”  
20

#### 21 FINDINGS OF FACT

22 The record supports the following findings of fact (FF) by a  
23 preponderance of the evidence.

24 1. Mangels describes a tool (flashlight 10) including a body  
25 (casing 11) defining a canister compartment (not enumerated) and a  
26 flashlight compartment (not enumerated), a flashlight head (closure cap 15)

1 securable to the body at a first end, a switch assembly (member 31, lead 32  
2 and switch 33) housed by the body, wherein the switch assembly controls  
3 power delivery to the flashlight head from a battery (25) disposed in the  
4 flashlight compartment, a nozzle (ejection tube 61) securable to the body,  
5 and a trigger assembly (68) mounted on the body proximate to the switch  
6 assembly, wherein actuation of the trigger assembly ejects spray through the  
7 nozzle from a spray canister (container 26) disposed in the canister  
8 compartment, and further wherein either the trigger assembly or the switch  
9 assembly may be actuated without changing grip on the body (col. 2, ll. 6-  
10 17, 37-54; col. 4, ll. 1-5, 29-31, 52-67; fig. 1).

11 2. The nozzle of the tool described in Mangels is not provided at a  
12 second end of the body (fig. 1).

13 3. Tuscher describes a tool (self-defense device 1) including a  
14 body (housing part 2, tubular part 12) defining a canister compartment  
15 (second housing part 13) and a flashlight compartment (battery compartment  
16 5), a flashlight head (lamp head 3) securable to the body at a first end, a  
17 switch assembly (6) housed by the body, wherein the switch assembly  
18 controls power delivery to the flashlight head from a battery (not numbered)  
19 disposed in the flashlight compartment, a nozzle (21) secured to the body at  
20 a second end, and a trigger assembly (actuating element 22), wherein  
21 actuation of the trigger assembly ejects spray through the nozzle from a  
22 spray canister (14) disposed in the canister compartment (col. 4, ll. 13-24,  
23 33-37, 48-55; figs. 1 and 2).

PRINCIPLES OF LAW

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int’l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1734 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966).

In *KSR*, the Supreme Court explained that “[w]hen a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability.” *KSR*, 127 S.Ct. at 1740. The Court further explained, “[o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *Id.* at 1740-41.

The Court noted that “[t]o facilitate review, this analysis should be made explicit.” *Id.* at 1741, citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”). However, “the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.* at 1741.

## ANALYSIS

The Examiner rejects all of the claims as unpatentable over Mangels and Tuscher finding that Mangels describes all of the claimed features except for the nozzle secured to the body at a second end (recited in independent claims 1 and 16) and a fluid tight seal (recited in dependent claim 13) (FF 1 and 2; Ans. 3-5). The Examiner relies on Tuscher which describes a tool having a nozzle at a second end opposite the flashlight head to cure the deficiencies of Mangels (FF 3), and concludes that all of the claims would have been obvious to one of ordinary skill in the art (Ans. 5).

In the Appeal Brief, the Appellants argue various rejected claims separately. We address the Appellants' arguments *infra*.

1           Claim 1

2           The Appellants contend that the Examiner erred because if the tool of  
3 Mangles is modified in view of Tuscher in the manner suggested by the  
4 Examiner, the tool of Mangles would not be able to perform its intended  
5 purpose of ejecting a spray of a chemical “directly through and parallel with  
6 the center of the array of light, when desired” (col. 3, ll. 61-67; App. Br. 4  
7 and 5). In addition, the Appellants contend that modifying Mangles in view  
8 of Tuscher is improper because the principle of operation of the tool of  
9 Mangles would be changed (App. Br. 5 and 6). The Appellants further  
10 contend that the spray opening 19 on the tubular body 12 of Tuscher is not a  
11 nozzle and that the nozzle 21 is not associated with, or securable to, the  
12 tubular body 12 (App. Br. 6). Hence, the Appellants argue that Tuscher does  
13 not describe a nozzle that is secured to the second end as recited in  
14 independent claim 1 (App. Br. 6).

15           Firstly, we disagree with the Appellants’ contention that the tool of  
16 Mangles would not be usable according to its intended purpose when  
17 modified to provide a nozzle at the second end based on Tuscher (App. Br.  
18 5). The Appellants’ argument is based on *In re Gordon* which held that  
19 turning a prior art filter device upside down would render the filter  
20 “inoperable for its intended purpose.” *See In re Gordon*, 733 F.2d 900, 902  
21 (Fed. Cir. 1984). However, ejecting a spray of a chemical “directly through  
22 and parallel with the center of the array of light” is not the sole intended  
23 purpose of the tool described in Mangles. While ejecting a spray of a  
24 chemical through, and parallel with, the center of the light is described as



1 being a special feature of the tool of Mangels, this feature is subservient to  
2 the broader purpose also described in Mangels which is to provide a  
3 flashlight that dispenses chemicals which can be used as a non-lethal  
4 weapon (col. 1, ll. 33-36). In this regard, even the portion of Mangels cited  
5 by the Appellants states that the described special feature is for  
6 accomplishing “other purposes of this flashlight” (col. 3, ll. 61-68). Mere  
7 repositioning of the nozzle to the second end of the tool of Mangels does not  
8 make the tool “inoperable” or impede full performance of the noted broader  
9 intended purpose of the tool.

10 Secondly, the Appellants incorrectly apply the law in contending that  
11 the principle of operation of the tool of Mangels would be changed if  
12 modified in view of Tuscher. The Appellants contend that “[i]t is clear that  
13 location of a nozzle at the end of the rear barrel portion 12 of the Mangels  
14 flashlight 10 requires a change in the operation of the flashlight 10” (App.  
15 Br. 6).

16 However, “principle of operation” referred to by the Appellants  
17 actually relates to the “basic principles” under which the prior art device was  
18 designed to operate. *In re Ratti*, 270 F.2d 810, 813 (CCPA 1959) (“This  
19 suggested combination of references would require a substantial  
20 reconstruction and redesign of the elements shown in [the primary reference]  
21 as well as a change in the *basic principles* under which the [primary  
22 reference] construction was designed to operate.” (Emphasis added)). In  
23 *Ratti*, the modification suggested by the Examiner changed the basic  
24 principle of sealing from attaining sealing through a rigid, press-fit, interface

1 between the components, to attaining sealing by providing a resilient  
2 interface between the components. *Id.* at 811-13. Such a modification  
3 fundamentally changes the technical basis of how a seal performs its sealing  
4 function and how a sealed interface is attained.

5 Thus, “a change in the basic principles” refers to change that is  
6 fundamental in scope so as to relate to scientific or technical principles  
7 under which the invention is designed to operate. It cannot be said that  
8 “change in the basic principles” occurs by mere rearrangement of the  
9 components in the prior art device. Otherwise, any modification to a prior  
10 art device can be considered “a change in the basic principles”, thereby  
11 eliminating the need for obviousness analysis under 35 U.S.C. § 103.

12 The basic principle under which the tool of Mangels is designed to  
13 operate is not changed at all by relocating the nozzle to the second end of the  
14 tool as taught in Tuscher. As stated by the Examiner, “Tuscher is used to  
15 illustrate that the nozzle could be place[d] at a different location” (Ans. 6).  
16 Therefore, because mere repositioning of the nozzle does not change the  
17 basic principle under which the tool of Mangels operates, we find the  
18 Appellants’ argument to the contrary unpersuasive.

19 Finally, with respect to claim 1, we disagree with the Appellants’  
20 contention that Tuscher does not describe a nozzle that is secured to the  
21 second end as recited in independent claim 1 (App. Br. 6). While the  
22 Appellants’ Specification describes structure (such as the threads 32 that  
23 engage the threads 27 of the body 11) for directly securing the nozzle to the  
24 body (Spec. 6, ll. 14-22; Fig. 1), claim 1 does not recite any structure that

1 would require such direct securement between the recited nozzle and the  
2 body. All that is recited is that the nozzle be “securable” to the body at a  
3 second end.

4 During prosecution, claims are to be given their broadest reasonable  
5 construction in light of the specification as it would be interpreted by one of  
6 ordinary skill in the art, and giving broad construction to claim terms is not  
7 unreasonable during examination because the applicant can amend the  
8 claims. *See In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed.  
9 Cir. 2004). Moreover, “[a]bsent claim language carrying a narrow meaning,  
10 the PTO should only limit the claim based on the specification or  
11 prosecution history when those sources expressly disclaim the broader  
12 definition.” *In re Bigio*, 381 F.3d 1320, 1325 (Fed Cir. 2004).

13 In the present case, there does not appear to be a specific definition or  
14 disclaimer of the term “securable” provided by the Appellants. Thus, when  
15 the claim limitation “securable” is broadly construed, we do not find it  
16 unreasonable to consider the nozzle 21 of the spray canister 14 of Tuscher as  
17 being “securable to the body at a second end” by virtue of the fact that the  
18 spray canister 14 is securable to the second end of the tool (FF 3).

19 Therefore, in view of the above, the Appellants have not shown that  
20 the Examiner erred in rejecting independent claim 1 as unpatentable over  
21 Mangels and Tuscher.

1           Claims 2, 6 and 8-15

2           While the Appellants utilize separate headings for each of these  
3 claims within the Appeal Brief, the Appellants merely rely upon their  
4 ultimate dependency from independent claim 1 for patentability and do not  
5 provide specific arguments directed to the limitations recited therein (App.  
6 Br. 7-9). Thus, because we have found that the Appellants have not shown  
7 that the Examiner erred in rejecting independent claim 1, we likewise find  
8 that Appellants have not shown that the Examiner erred in rejecting claims  
9 2, 6 and 8-15. *See* 37 C.F.R. 41.37(c)(1)(vii) (2007).

10

11           Claim 3

12           The Appellants contend that Mangels does not describe a safety  
13 aperture or a safety that extends into the body via the safety aperture as  
14 recited in claim 3 (App. Br. 7). Instead, the safety locking device 76 of  
15 Mangels resides on top of the trigger 68 and engages a flat raised surface of  
16 a barrel portion 12 (App. Br. 7). Tuscher does not disclose any type of a  
17 safety mechanism. Thus, the Appellants further contend that the  
18 combination of Mangels and Tuscher fails to describe the invention of claim  
19 3. We agree.

20           The portion of Mangels cited by the Examiner in support of the  
21 rejection (col. 5, ll. 37-61; Ans. 6) does describe a safety feature to prevent  
22 accidental activation of the trigger for ejecting the chemical. However,  
23 Mangels does not appear to describe the recited safety aperture or the safety  
24 76 extending into the body through the recited aperture. Tuscher does not

1 appear to cure this deficiency of Mangels. The Examiner has not established  
2 that trigger safety devices which extend into a body via a safety aperture are  
3 known in the art, and has not articulated any rational reason for modifying  
4 the safety and body of Mangels to provide the recited features of claim 3.  
5 *See KSR*, 127 S.Ct. at 1741. Therefore, the Appellants have shown that the  
6 Examiner erred in rejecting claim 3 as unpatentable over Mangels and  
7 Tuscher.

8

9 Claim 4

10 The Appellants contend that the safety locking device 76 of Mangels  
11 travels transversely with respect to trigger arrangement 68, and thus, does  
12 not describe that the depression of the safety disengages the safety from a  
13 cavity in the trigger (App. Br. 7).

14 We note that claim 4 is dependent on claim 3 discussed *supra*. In  
15 addition, the Examiner has not provided a specific citation to Mangels in  
16 support of this rejection, or articulated any rational reason for modifying  
17 Mangels to provide the recited features (Ans. 6). Therefore, the Appellants  
18 have shown that the Examiner erred in rejecting claim 4 as unpatentable  
19 over Mangels and Tuscher.

20

21 Claim 5

22 While the Appellants merely rely upon ultimate dependency from  
23 independent claim 1 for patentability of claim 5, and do not provide specific  
24 arguments directed to the limitations recited therein (App. Br. 8), claim 5

1 depends from claim 3 discussed *supra*. Therefore, we find that the  
2 Examiner erred in rejecting claim 5 as unpatentable over Mangels and  
3 Tuscher.

4

5 Claim 7

6 The Appellants contend that the tool of Mangels does not describe a  
7 locking member disposed through the safety aperture or a biasing  
8 mechanism to bias the locking member against the trigger as recited in claim  
9 7 (App. Br. 8). We agree.

10 We first note that claim 7 depends from claim 3 discussed *supra*. In  
11 addition, the portion of Mangels cited by the Examiner in support of the  
12 rejection (col. 4, ll. 19-22; Ans. 7) merely describes a spring for the valve in  
13 the aerosol container and does not relate to the locking member. The  
14 Examiner also does not articulate any rational reason for modifying Mangels  
15 to provide the recited features. Therefore, the Appellants have shown that  
16 the Examiner erred in rejecting claim 7 as unpatentable over Mangels and  
17 Tuscher.

18

19 Claim 16

20 The Appellants present substantially the same arguments submitted  
21 relative to independent claim 1 for arguing the patentability of independent  
22 claim 16 (App. Br. 9-12). Thus, for the same reasons discussed *supra*  
23 relative to claim 1, we find that the Appellants have not shown that the

1 Examiner erred in rejecting independent claim 16 as unpatentable over  
2 Mangels and Tuscher.

3

4 Claims 17-20

5 While the Appellants utilize separate headings for each of these  
6 claims within the Appeal Brief, the Appellants merely rely upon their  
7 dependency from independent claim 16 for patentability, and do not provide  
8 specific arguments directed to the limitations recited therein (App. Br. 13).

9 Thus, because we have found that Appellants have not shown that the  
10 Examiner erred in rejecting independent claim 16, we likewise find that  
11 Appellants have not shown that the Examiner erred in rejecting claims 17-  
12 20. *See* 37 C.F.R. 41.37(c)(1)(vii) (2007).

13

14

CONCLUSIONS

15 1. The Appellants have not shown that the Examiner erred in  
16 rejecting claims 1, 2, 6 and 8-20 as unpatentable over Mangels and Tuscher.

17 2. The Appellants have shown that the Examiner erred in rejecting  
18 claims 3-5 and 7 as unpatentable over Mangels and Tuscher.

19

20

ORDER

21 1. The Examiner's rejection of claims 1, 2, 6 and 8-20 is  
22 AFFIRMED.

23 2. The Examiner's rejection of claims 3-5 and 7 is REVERSED.

